

APPLICANT: David Dean Rowley *et al.*
SERIAL NO.: 10/060,345
DOCKET NO.: 23415-012
CUSTOMER NO.: 29315

LISTING OF CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the Application.

1. (*Currently Amended*) A computer-implemented system, An exercise launcher that is associated with a single computer that performs selected exercises using different virtual machines, the exercise launcher comprising:

two or more virtual machines installed on a single local computer, wherein the two or more virtual machines are implemented using different operating system environments;

a database that stores information corresponding to at least one or more exercises and the two or more virtual machines;

a user interface that displays a list of ~~classroom~~ the one or more exercises and enables the , wherein each classroom exercise is associated with one or more virtual machines and wherein each virtual machine is associated with a different operating system, the user interface enabling a user to select a ~~classroom~~ at least one exercise;

an exercise loader that is configured to access the database to ~~determine a database that determines the one or more virtual machines that are~~ associated with the selected ~~classroom~~ at least one exercise; and

a virtual machine launcher that launches the ~~one or more~~ virtual machines associated with the selected ~~classroom~~ at least one exercise.

2. (*Currently Amended*) The ~~exercise launchers~~ system of claim 1, wherein the database comprises a ~~classroom database that further stores~~ information including the names of the one or more classroom exercises and associates each name with one two or more virtual machine identifiers associated with the two or more virtual machines and wherein the exercise loader is further configured to access the database to determine the virtual machine identifiers associated with the selected at least one exercise.

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3. (*Currently Amended*) The ~~exercise-launchers~~system of claim 21, wherein the database is adapted to store further stores information including the one-two or more of the virtual machine identifiers associated with the two or more virtual machines associated with the corresponding selected classroom exercise.

4. (*Currently Amended*) The ~~exercise-launchers~~system of claim 32, wherein each of the ~~one or more virtual machines that correspond to with which the selected at least one classroom exercise is~~are associated with ~~comprises~~comprises a set of virtual machine (VM) files.

5. (*Currently Amended*) The ~~exercise-launchers~~system of claim 4, wherein each ~~the~~ set of VM files ~~comprises~~comprise, at the least, a virtual disk file.

6. (*Currently Amended*) The ~~exercise-launchers~~system of claim 5, wherein each ~~the~~ set of VM files further ~~comprises~~comprise a suspended state file.

7. (*Currently Amended*) A ~~classroom-computer-implemented~~ system, comprising:
a virtual machine platform that enables multiple operating system environments to run concurrently on a single local computer using hardware resources of the classroom computer system;

one-two or more virtual machines associated with the virtual machine platform, wherein the two or more virtual machines are installed on the single local computer, wherein the two or more virtual machines are configured to enable a user to perform exercises, and wherein each of the one or more virtual machines has a corresponding operating system and corresponding application programs configured to run on the corresponding operating system and wherein each of the one-two or more virtual machines isare associated with a different operating system environments; and

a database that stores information corresponding to at least the exercises and the two or more virtual machines~~an exercise-launcher that associated classroom exercises with the one or more virtual machines.~~

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8. *(Currently Amended)* The ~~classroom computer system~~ of claim 7, wherein the ~~exercise launcher further comprises~~comprising:

a user interface that displays a list of ~~classroom the~~ exercises, ~~wherein each classroom exercise is associated with one or more virtual machines and enables~~ wherein the user interface ~~enables a~~the user to select a ~~classroom~~at least one exercise;

an exercise loader that is configured to access the a database that determinesto determine the ~~one or more~~ virtual machines that are associated with the selected ~~classroom~~at least one exercise; and

a virtual machine launcher that launches the ~~one or more~~ virtual machines associated with the selected ~~classroom~~at least one exercise.

9. *(Currently Amended)* The ~~classroom computer system~~ of claim 8, wherein the database ~~comprises a classroom database that further stores information including a the name of~~ the selected at least one classroom exercise and two or more virtual machine identifiers associated with the two or more virtual machines and wherein the exercise loader is further configured to access the database to determine the associates the name of the selected classroom exercises with one or more virtual machine identifiers associated with the selected at least one exercise.

10. *(Currently Amended)* The ~~classroom computer system~~ of claim 98, wherein the ~~classroom database further stores information including is adapted to associate the one or more of the virtual machine identifiers associated with the name of the selected at least one classroom exercise.~~

11. *(Currently Amended)* The ~~classroom computer system~~ of claim 7, wherein each of the ~~one or more~~ virtual machines associated with the selected at least one exercise are further associated with ~~comprises~~ a set of virtual machine (VM) files.

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12. (*Currently Amended*) The ~~classroom computer system~~ of claim 11, wherein each the set of VM files ~~comprises~~ comprise a virtual disk file.

13. (*Currently Amended*) The ~~classroom computer system~~ of claim 12, wherein each the set of VM files further ~~comprises~~ comprise a suspended state file.

14. (*Currently Amended*) A computer-implemented system for configuring a classroom computer, comprising:

two or more virtual machines installed on a single local computer, wherein the two or more virtual machines are implemented using different operating system environments;

means for determining ~~names~~ a name of one or more courses ~~a course~~ that are ~~is~~ available to be installed ~~onto the classroom on the single local computer, wherein the course is associated with one or more classroom exercises and each classroom exercise is associated with one or more virtual machines, wherein each virtual machine is associated with a different operating systems, and wherein each virtual machine (VM) is associated with a set of VM files;~~

means for displaying the ~~names~~ name of the one or more courses ~~course~~ to a user of the system;

means for enabling the user to select at least one ~~the~~ course;

means for installing the selected course on the ~~classroom~~ single local computer;

means for determining ~~the names of the one or more classroom exercises~~ that are associated with the selected at least one course;

means for storing the course name and the names of the one or more ~~classroom exercises~~, ~~in a database that is accessible to the classroom computer, wherein the course name is associated with corresponding classroom exercise names to enable the user to~~ wherein selecting the course name enables retrieval of ~~retrieve the names of~~ for the one or more ~~classroom exercises~~ associated with the selected course name;

means for enabling the user to select at least one exercise;

means for determining ~~at the virtual machines~~ VM that are ~~is~~ associated with ~~one of the selected at least one exercise~~ one or more classroom exercises; and

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means for ~~storing the~~ creating a set of VM-virtual machine files that correspond to the virtual machines that are associated with the selected at least one exercise from the determined Vm.

15. *(Currently Amended)* The system of claim 14, further comprising means for storing ~~a VM identifier~~ virtual machine identifiers in the database that correspond to the two or more virtual machines, wherein said VM identifier identifies said determined VM.

16. *(Currently Amended)* The system of claim 15, wherein the name of the ~~classroom~~ selected at least one exercise that is associated with the determined VM is further associated with ~~said corresponding virtual machine identifiers~~ VM identifier so that the system is adapted to retrieve the ~~VM identifier~~ virtual machine identifiers upon selecting the name of the ~~classroom~~ exercise.

17. *(Currently Amended)* The system of claim 16, wherein ~~said VM identifier is the~~ virtual machine identifiers are configured to locate said set of ~~VM-virtual machine files that correspond to the virtual machines that are associated with the selected exercises stored on the~~ storage device.

18. *(Currently Amended)* The system of claim 17, wherein said set of ~~VM-virtual machine files~~ consists of ~~comprise~~ one or more files.

19. *(Currently Amended)* The system of claim 18, wherein said set of ~~VM-virtual machine files~~ comprises ~~comprise~~ a virtual disk file.

20. *(Currently Amended)* The system of claim 19, wherein said set of ~~VM-virtual machine files~~ further comprises ~~comprise~~ a suspended state file.

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21. *(Currently Amended)* A computer implemented method for enabling a user to perform ~~an exercise~~two or more exercises using a single local computer, comprising:

displaying a list of the two or more exercises, wherein the two or more exercises are associated with ~~one or more operating systems that are implemented using one~~two or more virtual machines;

receiving an indication ~~to execute at~~that the user has selected one of the listed two or more exercises;

determining the ~~one~~two or more virtual machines associated with the selected ~~exercise~~exercises; and

launching, on the single local computer, the two or more virtual machines associated with the selected ~~classroom exercise~~exercises, wherein the two or more virtual machines are implemented using different operating system environments.

22. *(Currently Amended)* The method of claim 21, wherein ~~the act of determining the one~~two or more virtual machines associated with the selected ~~exercise~~exercises comprises accessing a ~~classroom~~ database that stores ~~the names of the classroom exercises and associating the names and associates each name with one~~two or more virtual machine identifiers that correspond to the two or more virtual machines.

23. *(Currently Amended)* The method of claim 22, wherein ~~the act of determining the one~~two or more virtual machines associated with the selected exercise further comprises determining the ~~one~~two or more of the virtual machine identifiers associated with the name of a the selected ~~classroom~~ exercise.

24. *(Currently Amended)* The method of claim 23, wherein ~~each of the one~~two or more virtual machines associated with ~~which the selected exercises comprise~~classroom exercise is associated comprises a set of virtual machine (VM) files.

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25. (*Currently Amended*) The method of claim 24, wherein ~~each~~ the set of VM files ~~comprises~~ comprise, at the least, a virtual disk file.

26. (*Currently Amended*) The method of claim 25, wherein ~~each~~ the set of VM files further ~~comprises~~ comprise a suspended state file.

27. (*Currently Amended*) A computer implemented method for configuring a classroom single local computer, comprising:

determining ~~a name~~ names of ~~a course~~ one or more courses that ~~is~~ are available to be installed ~~onto~~ on the ~~classroom single local~~ computer, wherein the course is associated with one or more classroom exercises and each classroom exercise is associated with one or more virtual machines, wherein each virtual machine is associated with a different operating systems, and wherein each virtual machine (VM) is associated with a set of VM files;

displaying the ~~name~~ names of the ~~course~~ one or more courses to a user of the computer;
enabling the a user to select the ~~at least one~~ at least one course and to provide an indication that the user desires a request to install the at least one course on the ~~classroom single local~~ computer;

receiving an indication that the user desires to install the at least one course on the ~~classroom single local~~ computer;

determining the names of the ~~classroom exercises~~ that are associated with the selected at least one course;

storing the course name and the names of the ~~one classroom exercises~~ wherein selecting the course name enables retrieval of in a database that is accessible to the classroom computer, wherein the course name is associated with the classroom exercise names so that providing the course name enables retrieval of the names of exercises associated with the course name from the database;

enabling the user to select at least one exercise;

determining ~~a VM~~ virtual machines that ~~is~~ are associated with ~~one of the~~ selected at least one exercise, wherein two or more virtual machines are implemented using different operating system environments ~~one or more classroom exercises~~; and

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~~creating storing the set of VM-virtual machine files that correspond to the virtual machines that are associated with the selected at least one exercise that belong to said determined VM.~~

28. *(Currently Amended)* The method of claim 27, further comprising storing a ~~VM identifier~~virtual machine identifiers that are associated with the two or more virtual machines in the database, wherein said VM identifier identifies said determined VM.

29. *(Currently Amended)* The method of claim 28, further comprising associating the name of the ~~selected at least one exercise-classroom-exercise~~ with said ~~VM identifier~~corresponding virtual machine identifiers, so that providing the name of the ~~at least one exercise-classroom-exercise enables~~ enables retrieval of the ~~VM identifier~~corresponding virtual machine identifiers.

30. *(Currently Amended)* The method of claim 29, wherein ~~said VM identifier is the~~ virtual machine identifiers are used to locate ~~said the set of VM-virtual machine files that correspond to the virtual machines that are associated with the selected at least one exercise stored on the storage device.~~

31. *(Currently Amended)* The method of claim 30, wherein said set of ~~VM-virtual machine files~~ consists of~~comprise~~ one or more files.

32. *(Currently Amended)* The method of claim 31, wherein said set of ~~VM-virtual machine files~~ comprises~~comprise~~ a virtual disk file.

33. *(Currently Amended)* The method of claim 32, wherein said set of ~~VM-virtual machine files~~ further comprises~~comprise~~ a suspended state file.

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34. (*Currently Amended*) A computer program product ~~for enabling a user to perform an exercise using a single computer, the computer program product being embodied in a~~ computer readable medium, ~~and comprising computer instructions for:~~

displaying a list of exercises, wherein the exercises are associated with ~~one or more operating systems that are implemented using one~~ two or more virtual machines installed on a single local computer;

receiving an indication that a user has ~~to execute a selected one of the listed~~ two or more exercises;

determining the ~~one~~ two or more virtual machines associated with the selected ~~exercise~~ exercises; and

launching, on the single local computer, the two or more virtual machines associated with the selected ~~classroom exercise~~ exercises, wherein the two or more virtual machines are implemented using different operating system environments.

35. (*Currently Amended*) The computer program product of claim 34, wherein the computer instructions for determining the ~~one~~ two or more virtual machines associated with the selected ~~exercise~~ exercises comprises computer instructions for accessing a ~~classroom~~ database that stores the names of the ~~classroom~~ exercises and ~~associates each name~~ associating the names with ~~one~~ two or more virtual machine identifiers that correspond to the two or more virtual machines.

36. (*Currently Amended*) The computer program product of claim 35, wherein the computer instructions for determining the ~~one~~ two or more virtual machines associated with the selected ~~exercise~~ exercises further comprises computer instructions for determining the ~~one~~ two or more of the virtual machine identifiers associated with the name of a ~~the~~ selected ~~classroom exercise~~ exercises.

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37. (*Currently Amended*) The computer program product of claim 36, wherein each of the ~~one two~~ or more virtual machines associated with the selected ~~classroom exercise~~ comprises ~~a set of exercises~~ comprise virtual machine (VM) files.

38. (*Currently Amended*) The computer program product of claim 37, wherein each ~~the~~ set of VM virtual machine files ~~comprises~~ comprise, at the least, a virtual disk file.

39. (*Currently Amended*) The computer program product of claim 38, wherein each ~~the~~ set of VM virtual machine files further ~~comprises~~ comprise a suspended state file.

40. (*Currently Amended*) A computer program product ~~for configuring a classroom computer, the computer program product being embodied in a computer readable medium, and comprising computer instructions for:~~

installing two or more virtual machines on a single local computer, wherein the two or more virtual machines are implemented using different operating system environments;

determining a name ~~names~~ of a ~~course~~ one or more courses that ~~is~~ are available to be installed ~~onto on~~ the ~~classroom single local~~ computer, wherein the ~~course is associated with one or more classroom exercises and each classroom exercise is associated with one or more virtual machines, wherein each virtual machine is associated with a different operating systems, and wherein each virtual machine (VM) is associated with a set of VM files;~~

displaying the name ~~names~~ of the ~~course one or more courses~~ to a user of the computer;

enabling the ~~a~~ user to select the at least one course; and

enabling the user to provide an indicator requesting installation of an indication that the user desires to install the ~~at least one~~ course on the ~~classroom single local~~ computer;

receiving an indication that the user desires to install the ~~at least one~~ course on the ~~classroom single local~~ computer;

determining the names of the ~~one or more classroom exercises~~ that are associated with the selected at least one course;

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storing the course name and the names of the ~~one or more classroom exercises~~, wherein selecting the course name enables retrieval of in a database that is accessible to the classroom computer, wherein the course name is associated with the classroom exercise names so that providing the course name enables retrieval of the names of for the one or more classroom exercises associated with the course name from the database;

enabling the user to select exercises;

determining the virtual machines a VM that is are associated with ~~one of the selected exercises one or more classroom exercises~~; and

creating storing the set of VM virtual machine files that correspond to the virtual machines that are associated with the selected exercises that belong to said determined VM.

41. *(Currently Amended)* The computer program product of claim 40, further comprising computer instructions for storing virtual machine identifiers that correspond to the two or more virtual machines a VM identifier in the database, wherein said VM identifier identifies said determined VM.

42. *(Currently Amended)* The computer program product of claim 41, further comprising computer instructions for associating the name of the ~~classroom exercise~~ selected exercises with said VM identifier corresponding virtual machine identifiers so that providing the name of the ~~classroom exercise~~ exercises enables retrieval of the corresponding virtual machine identifiers VM identifier.

43. *(Currently Amended)* The computer program product of claim 42, wherein said VM identifier ~~is the~~ the virtual machine identifiers are used to locate said the set of VM virtual machine files stored on the storage device that correspond to the virtual machines that are associated with the selected exercises.

44. *(Currently Amended)* The computer program product of claim 43, wherein said set of VM the virtual machine files ~~consists of~~ comprise one or more files.

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45. (*Currently Amended*) The computer program product of claim 44, wherein ~~said set of VM~~ the virtual machine files ~~comprises~~ comprise a virtual disk file.

46. (*Currently Amended*) The computer program product of claim 45, wherein ~~said set of VM~~ the virtual machine files further ~~comprises~~ comprise a suspended state file.

47. (*Canceled*)

48. (*Canceled*)